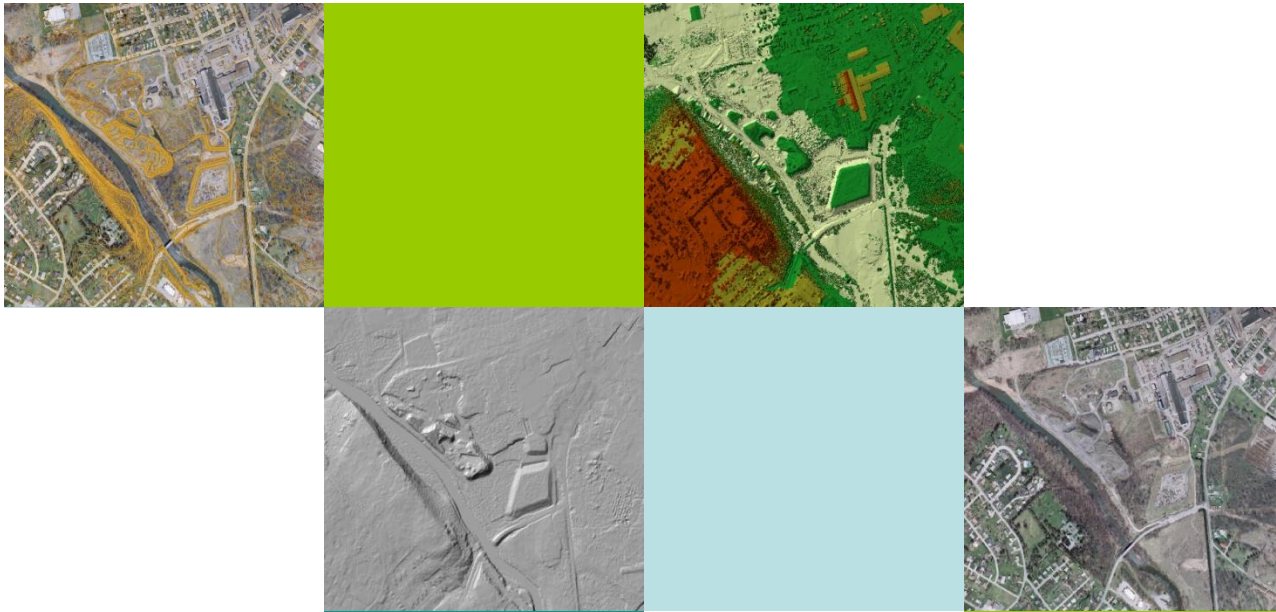


Putting “Place” in IT Workflows Empowers the Enterprise

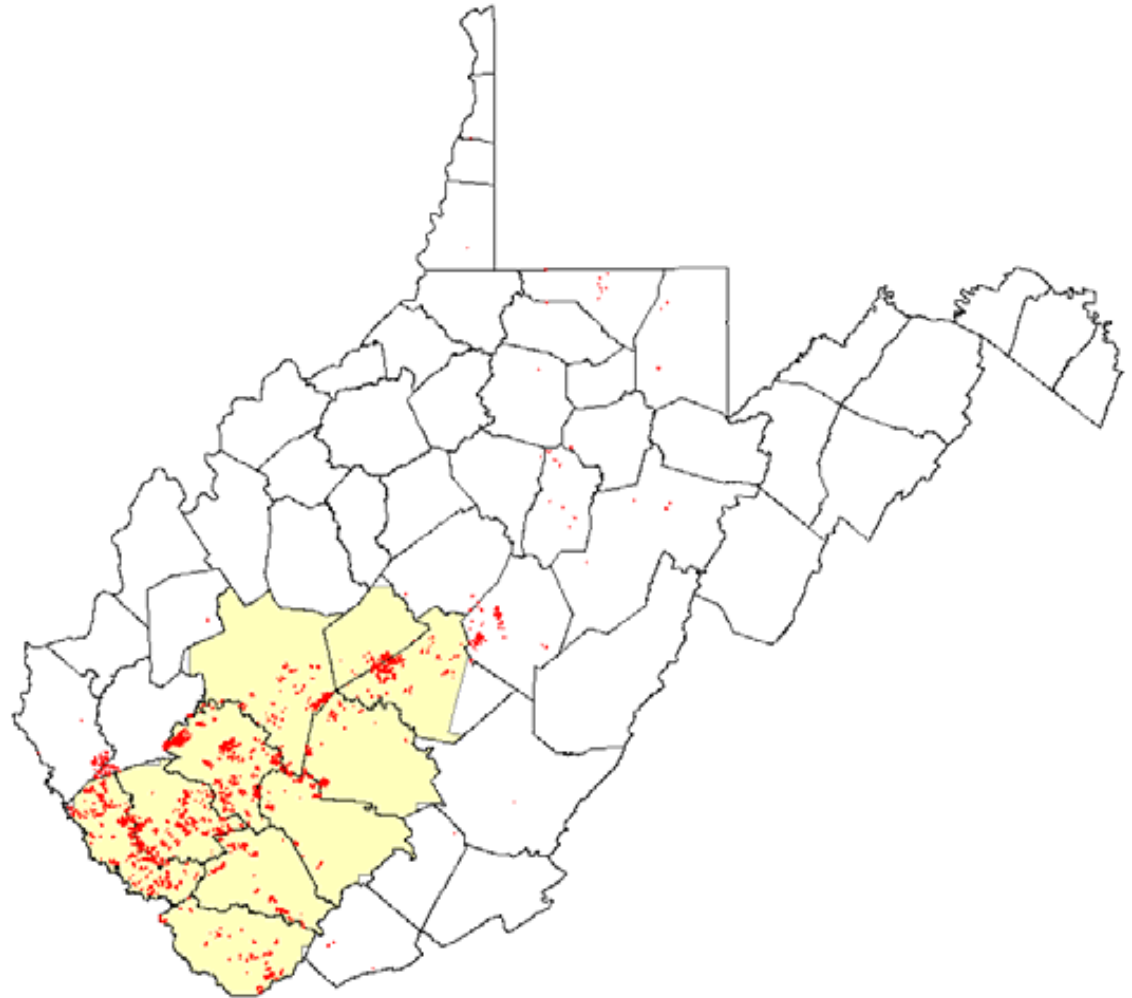


West Virginia Information Technology Summit 2009

November 5, 2009

The problem: determine the number of miles of streams under valley fills in southern West Virginia

- What a valley fill looks like
- Where they are located in our State
- Early in this decade



The existing RDB resource in 2001: Oracle –based ERIS



ERIS's representation of a valley fill

- **Because of the Mountain Top mining controversy, we were tasked to figure out how many miles of streams were covered by valley fills.**

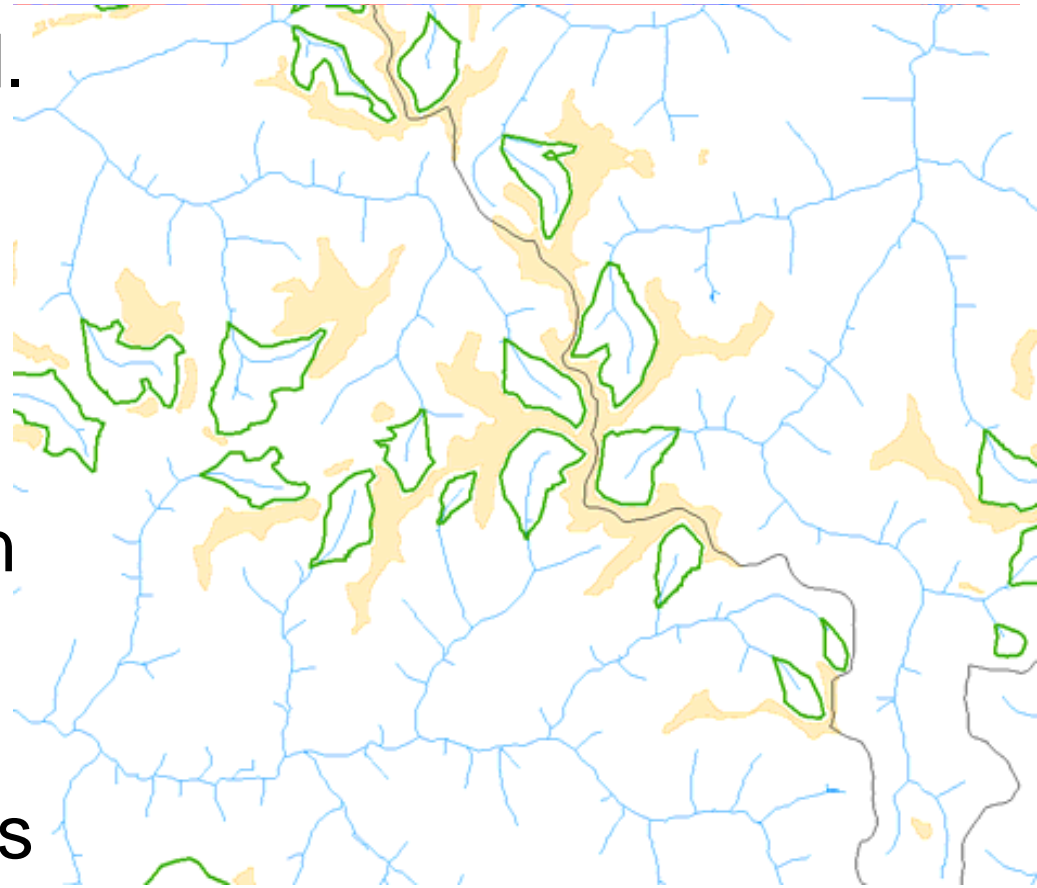
Resources were provided



With the funding Interferometric synthetic aperture radar (IFSAR) elevation data was purchased for 10 counties in southern West Virginia.

The geospatial solution: created data not in our existing database.

- Initial difference grid. Cut areas are red, fills blue.
- Results of initial reclassification.
- Initial vector polygon fill inventory.
- Final inventory, shown with cut areas added



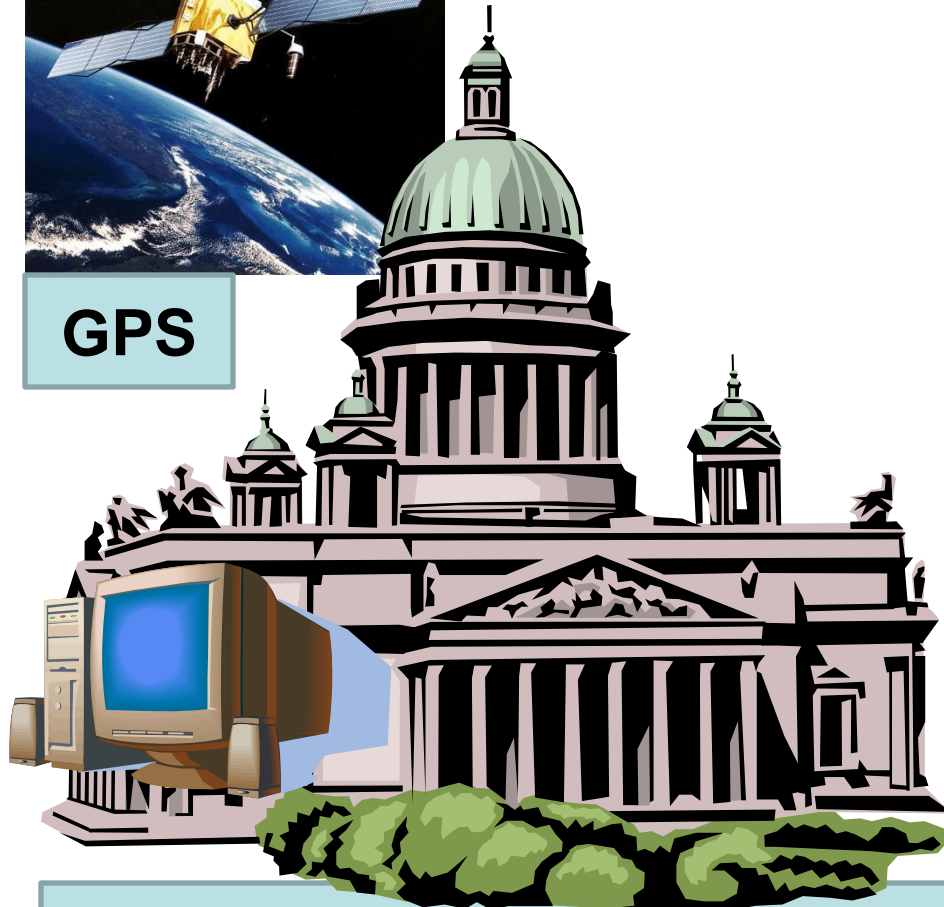
Results of the geospatial approach

- **479.9 mi of streams were under fills.**
- Final inventory comprised 1,329 fill polygons covering an area of 38,633 acres (60.4 sq mi).
- 513 (38.6%) of the fills identified did not overlap any fill captured from permit map sources.

Yes but this kind of thing only applies to certain agencies ...



GPS



Charleston Capitol Complex



**Another
Location**



**Scalable
RFID**